One NSTAR Way
Westwood, Massachusetts 02090

[redacted]

RE: [redacted]

Dear [redacted]

On January 9, 2003, Boston Edison Company, d/b/a NSTAR Electric, ("NSTAR Electric") received the Notice of Intent to Interconnect a Cogeneration Facility for the above referenced facility. [redacted] is supplied by an NSTAR Electric "Spot Network Electrical System". A Spot Network supply is provided to customers when a premium level of reliability and power quality is required. NSTAR Electric's interconnection standards do not permit a cogeneration facility to connect to a Spot Network Electrical System. On January 31, 2003, an email stating this restriction was sent to [redacted].

At the direction of the Department of Telecommunications and Energy ("DTE"), representatives from all of the Massachusetts electric companies, along with representatives of the distributed generation industry (including [redacted] and other concerned parties have been participating in a collaborative effort to develop statewide standards for interconnection of distributed generation facilities, including cogeneration facilities. These new standards, if approved by the DTE, would permit 10KW or smaller cogeneration facilities to connect into a Spot Networks Electrical System without an engineering review or additional requirements. Since the proposed unit is 60 KW, this unit cannot be connected without an engineering analysis and potential other requirements.

On April 25, a meeting was held with representatives from [redacted] We explored possible solutions to allow the proposed cogeneration facility to interconnect. The following specific proposals were discussed:

1) Convert the facility to a radial system. The estimated customer cost for this would be $108,250
2) Provide a relay system similar to the US Coast Guard. This type of system has not yet been approved and is operating as a beta site at the Coast Guard. A final report will probably not occur for another 6-12 months. The cost for this system was $67,366 for equipment only. A study also would be required at the [redacted], the cost of which is not yet determined.

Unfortunately, even apart from the cost issues, these solutions cannot be implemented at [redacted]. Unlike the installation at the US Coast Guard Station, other NSTAR Electric customers are connected to the same Spot Network Electrical System as [redacted]. Either of the above solutions would lower the power quality to those other customers.

At this time, we need to re-emphasize that this cogeneration facility cannot be operated prior to NSTAR Electric's engineering review and approval. According to the Company's Electric Service Requirements, Section 305 B, this facility must be approved prior to any installation. I am stating this because it is our understanding that the unit was purchased and installed prior to application or approval.

Sincerely,

Frank Gundal
Sr. Engineer

Cc: Legal Department
[redacted]

From: [redacted]
Sent: Monday, May 05, 2003 7:30 AM
To: [redacted]
Cc: [redacted]
Subject: Cost Estimate for [redacted]

Frank,

To follow up on the discussions regarding the [redacted] Cogeneration application for [redacted], a cost estimate has been prepared. The estimated cost to convert [redacted] from a TNV to a Radial Fed Distribution Service is [redacted] The cost is based on the following assumptions:

Item	Description	Cost
1.	PME-9 Switch Installed (on customer property)	[redacted]
2.	6-5" PVC Conduit in Concrete From MH24950 to Switch 100 ft @ $90/ft	[redacted]
3.	1-5" PVC Conduit in Concrete from Switch to Transformer 25' @ $50/ft	[redacted]
4.	1-1000kVA Modified Padmount Transformer Installed in Vault	[redacted]
5.	200' 3-500 15kV FS Cable @ $50/ft	[redacted]
6.	200' 3-#1 AL 15kV Cable @ $40/ft	[redacted]
7.	Removal of 2 - 1000kVA Network Transformers Trucking/Rigging	[redacted]
Total		[redacted]

This is a "ball park" estimate only. Given this magnitude of cost, the customer should let NSTAR know if they would like to pursue this project. NSTAR would require a deposit for Engineering and Estimating prior to starting any design for this project. After the NSTAR design is completed, an accurate cost estimate can be developed. The customer should also be made aware that with this type of service, the possibility of outage, is greater than the existing 2 line network service.

[redacted]
Systems Engineering
[redacted]

One NSTAR Way
Westwood, Massachusetts 02090

February 18, 2004

[redacted]

Dear [redacted]

We received your letter dated February 12, 2004 with regard the installation of a PV distributed generation system on an Area Network.

In response to the items identified –

1. We have no evidence of any other utility allowing distributed generation onto an Area Network and would welcome any such design that does not negatively impact –
   a. The quality of service to neighboring customers
   b. Safety to both customers and NSTAR personnel
   c. NSTAR equipment
2. NSTAR does not design customer owned equipment, we only approve it as compatible with our own system. The design you are proposing would need to be stamped by a registered PE in Massachusetts. The terms used are standard utility nomenclature, which are defined in IEEE. The PE that you retain should be familiar with these standards as well as NSTAR's standards.
3. Distributed Resource (DR), Distributed Generation (DG), parallel operation etc. are all terms common to the industry. In this reference it is a generator operating in parallel with the grid. The meter is not pertinent.
4. NSTAR is very familiar with both the [redacted] (installed and operating at NSTAR office in Westwood) as well as [redacted] This unit is very well suited for radial systems, but does not address the concerns of a network system.
5. NSTAR supports distributed generation as long as it meets the criteria in item 1.
6. We respectfully disagree that our correspondence obfuscates the issue. Please see item 2.
7. IEEE Standard 1547-2003 prohibits the design you are proposing. In addition, the network protector manufacturer specifically states that the network protector should not be used for this type of design. This type of testing should not be done in the field where safety and reliability are impacted; it must instead be conducted in a certified lab such as UL in conjunction with the network protector manufacturer.
8. The network protectors are "instantaneous" devices, tripping within 2-5 cycles. It is against Prudent Utility Practices to coordinate multiple instantaneous devices.
9. The statement made was for DG in general, not PV in particular. The term "extremely unlikely" is unacceptable however due to the resulting consequences to NSTAR equipment and safety. Questions on this, the network protector or the consequences of a 480V arc should be referred to a qualified PE as described in 2.

One NSTAR Way
Westwood, Massachusetts 02090

10. The area network is not an individual customer; it is a matrix of customers. The interactions are dynamic and cannot therefore be monitored practically. In other words, every network protector is affected and would need to be monitored on a real time basis.
11. No response required
12. Characteristics on an area network are dynamic and would need to be constantly monitored. This is impractical for multiple small DG systems.
13. See item 9.
14. [redacted] cycle time is not sufficient. See item 8.
15. No response required.
16. Cycling refers to any amount of tripping. Network protectors are not dynamically reacting to changing conditions, they are responding to a problem. Locking out the inverter for 5 minutes, 30 minutes, or daily etc will not stop the premature failing of the network protector.
17. See item 1 & 2.

In conclusion, we appreciate your wishes to help the environment through the use of PV technology. If you were like 99% of our residential customers and not on an area network, this would have been "rubber stamped". The installation as proposed however, is not compatible with your electric service and we are therefore unable to approve it.

Sincerely,

Frank Gundal
Sr. Engineer

One NSTAR Way
Westwood, Massachusetts 02090

December 19, 2003

[redacted]

Dear [redacted]

We received your letter dated November 12, 2003 with regard to the proposed installation of a PV distributed generation at [redacted]. As previously stated, these proposed sites are on NSTAR's Area Network. The Area Network is designed to provide a high level of reliability to those customers connected to it. Technically it is not designed to have distributed generation interconnected.

The proposed State Wide Interconnection Tariff (Tariff) outlined the process for connecting 10kw PV to a "Spot Network System". Also outlined in the Tariff was the need to perform studies to understand the impact that larger distributed generation would have on a "Spot Network System. Unfortunately, at this time, technology does not permit the interconnection to an "Area Network Systems".

NSTAR is committed to serving our customers well and to protecting the environment through support of renewable resources. The PV Interconnection you are proposing can be connected to 90% of our electrical system. We have received over 100 applications during in 2003 alone using the proposed State-Wide Interconnection Tariff. Of these we had issues with 3. Although the probability is low for the proposed 1kw PV to create a safety or system disturbance, the consequences are high to worker safety, equipment damage, power quality and reliability on the down town Area Network System.

Sincerely,

Frank Gundal
Sr. Engineer

Cc: [redacted]

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

November 18, 2003

[redacted]

Dear [redacted]

We received your Notice of Intent to interconnect [redacted] of generation at [redacted] The electric supply at this location, as provided by NSTAR Electric, is known as a "Secondary Network Area". The recently developed statewide standard, for distributed generation, outlines the requirements to connect a photovoltaic power producer rated 10kw or small connecting to a secondary network system. Due to technical, operational and safety concerns, your proposed 2.25 Mw facility is not permitted to connect to the secondary network system. With this said, we are pleased to advise that other customers, who were originally connected to the secondary network system, have installed generators by modifying the interconnection to the electrical grid.

At the direction of the Department of Telecommunication and Energy (DTE) a collaborative effort of parties developed statewide standards to interconnect power producing devices. The emphasis of this collaborative was to streamline the process and to develop standards to promote interconnections. For the most part, the collaborative was successful at meeting the DTE's request. Although prior to the DTE order, many utilities, including NSTAR Electric, prohibited installation of generation to secondary network services, it was agreed to permit photovoltaic unit of 10 kw or smaller to connect to the network. It was also agreed to examine, study, and discuss other technologies to determine if we should modify these standards. The report, filed with the DTE, outlines the equipment limitations, operating concerns, and safety concerns that limited the generation to 10Kw on a secondary network supply. We would like to suggest you refer to the report filed with the DTE and IEEE C37-108 standard which provides additional technical issues limiting generator interconnection to secondary networks systems.

The DTE report outlines several alternatives, which will enable you to connect at [redacted] They include:

-Transferring the customer's load from a network supply to a radial service.
-Connecting the generator to the NSTAR primary supply.
-Connecting the generator and customer load using an open transition switch.

NSTAR looks forward to working on the above interconnection alternatives with your firm.

Sincerely,

Frank Gundal
Sr. Engineer

Cc: [redacted]

One NSTAR Way
Westwood, Massachusetts 02090

December 29, 2003

[redacted]

Dear [redacted]

This letter is in response to your letters of November 24 and December 18, 2003, to [redacted] referencing certain correspondence between [redacted] and NSTAR Electric.

First, let me assure you that your letters received immediate attention, as do all letters from our customers. Any delay in response is attributable solely to our desire to respond fully and accurately to the issues you have raised.

Second, we echo your desire to work together in a cooperative and productive way to determine how best to conclude the request for interconnection. As you know, NSTAR Electric participated extensively and cooperatively in the collaborative process for distributed generation interconnection sponsored by the Mass. DTE, and subscribes fully to the outcome of that collaborative, including the proposed tariff terms and conditions currently awaiting DTE approval. While there is some uncertainty as to what the appropriate process for review of interconnection requests should be in this interim period, given the existence of current regulations that are not responsive to evolving circumstances, and the pendency of approval of the new procedures, NSTAR Electric intends to follow, as much as possible, the proposed processes that were developed in collaboration with interested stakeholders. Please understand, however, that until the DTE has formally approved the proposed interconnection tariff, NSTAR Electric is not in a position to fully and completely follow every detail of the proposed process. With respect to timelines in particular, please note that, under the proposed process, the elapsed time is halted when necessary information is requested.

Without revisiting the details of recent interactions and communications regarding [redacted] request for interconnection, the following summarizes our understanding of where we are in the process, consistent with the proposed interconnection procedures:

- [redacted] has provided a "Notice of Intent" for this project, consistent with existing interconnection guidelines. [redacted] has not submitted a completed application, as required on page 67 of the proposed tariff. While we have been conducting a preliminary evaluation of the project based on the information you have provided thus far (including holding a "scoping meeting", as required on page 10 of the proposed tariff, with [redacted] on October 7), the additional information necessary for a completed application and the information specified in the Technical Comments attached is essential for us to continue the review process. Please be assured that NSTAR Electric will endeavor to meet the timelines for the review under the

One NSTAR Way
Westwood, Massachusetts 02090

proposed procedures once we have all of the information necessary to continue the review process, as detailed in the application form. For your convenience, a copy of the application form is attached as Appendix B.

- In the Notice of Intent, the required equipment specifications were not submitted. [redacted] provided manufacturer's literature on a Capstone 60kw microturbine generating unit. [redacted] has sent UL test data on the 60kw unit. The two-line diagram submitted proposed to connect 18 Capstone units together to make 600 kw and 480 kw generator units, with a single site output of 1080 kw of generation. We have not received manufacturer's technical data on the operation of the equipment at the proposed output levels. We have also not received test data from the manufacturer or an independent testing lab for the equipment to operate at this output level. It is our concern that the characteristics of a generator at 60 kw will not be similar to the equipment operating at 1080 kw.

Apart from the procedural deficiencies noted above, in reviewing the technical literature and other information submitted by [redacted] to date, NSTAR Electric has concluded that [redacted] has not addressed the technical issues necessary to permit interconnection with a Spot Network, and that the proposed design does not provide the necessary protection to NSTAR Electric's distribution system.

As a result, and contrary to the assertion in your November 24th letter, there remain significant technical, operational and safety issues that have not been addressed by [redacted] in the proposed interconnection design. These technical, operational and safety issues are detailed in the attached "Technical Comments – [redacted] – Network Distributed Generation", attached hereto as Appendix A.

We look forward to [redacted] addressing the requirements described in the Technical Comments attached and resubmitting an acceptable proposal. We are, of course, prepared to discuss any questions you may have on the Technical Comments.

In addition, and as a point of information, please be advised that NSTAR Electric has filed with the Mass. DTE (Docket No. 03-121), a proposed "stand-by" rate for self-generation and distributed generation that is designed to be fully compensatory to NSTAR Electric.

We look forward to your response and to developing a positive working relationship.

Sincerely,

Penni Conner
Vice President

Cc: [redacted]

One NSTAR Way
Westwood, Massachusetts 02090

David Le, NSTAR Account Management

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

March 29, 2004

[redacted]

RE: Proposed Solar Installation

Dear [redacted]

On November 4, 2002, Boston Edison Company, d/b/a NSTAR Electric, ("NSTAR Electric") received the Notice of Intent to Interconnect a Distributed Generation Facility for the above referenced facility [redacted]. is supplied by an NSTAR Electric "Area Network Electrical System". An Area Network supply is an interconnected supply system designed to provide customers with a premium level of reliability and power quality. NSTAR Electric's interconnection standards do not permit a distributed generation facility to connect to an Area Network Electrical System. On December 31, 2002, an email stating this restriction was sent to [redacted]

Sincerely,

Frank Gundal
Sr. Engineer

Cc: Legal Department
[redacted]

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

March 29, 2004

[redacted]

RE: [redacted] 60 kW Cogeneration Installation

Dear [redacted]

Several months ago we sent you the attached letter indicating the issues and procedures with interconnecting the proposed [redacted] at the above mentioned address. We have not heard back from [redacted] with regards this letter. At the time of the correspondence, [redacted] had indicated the unit had already been purchased and was on-site.

Could you please update us on the status of your request to interconnect this unit and confirm that it is not operating in parallel with NSTAR's electric system. Please note that interconnection of any generation equipment without NSTAR's approval is against published policy and can pose a danger to NSTAR equipment as well as the safety of NSTAR personnel.

Sincerely,

Frank Gundal
Sr. Engineer

Cc: Neven Rabadjija, NSTAR Legal Department
Larry Gelbein, NSTAR Engineering

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

March 29, 2004

[redacted]

Re: Request for Metering Change

Dear [redacted]

NSTAR Electric is in receipt of a letter, dated April 30, 2003, from [redacted] on behalf of [redacted] indicating [redacted] desire to install an [redacted] "cogeneration system," and requesting that individually billed meters be changed by NSTAR Electric to a single common meter. In the letter, [redacted] states that [redacted] plans to pay NSTAR Electric for the electricity measured by the single meter and allocate this cost among its members in some manner that is not specifically related to actual usage. The single service will supplement the internal generation that [redacted] intends to install and use to serve the condominium owners and the common space of the building.

NSTAR Electric is pleased to assist [redacted] in implementing its self-generation alternative to serve [redacted] members. The Company's Terms and Conditions for Distribution Services, M.D.T.E. No. 100, govern the requested meter change-out (the "Terms and Conditions"). A copy is included as Attachment 1 to this letter. In addition, a model Interconnection Tariff (the "Interconnection Tariff") regarding such installations is now pending approval before the Department of Telecommunications and Energy (the "Department"). The Interconnection Tariff establishes the terms that control the process and requirements for an interconnecting customer to connect a power generating facility, such as [redacted] 80 kW generator, to the NSTAR Electric's electrical power system. A copy of the Interconnection Tariff is included as Attachment 2 to this letter. Even though [redacted] states that it does not intend to sell power to the grid, the Interconnection Tariff's requirements apply to [redacted] generator because it will connected electrically to NSTAR Electric's power system and operate in parallel, synchronized with the voltage and frequency maintained by the Company during all operating conditions.[1]

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1 An Interconnection Service Agreement will be required to provide for parallel operation of the generator with NSTAR's electric power system. See Interconnection Tariff, § 2.0.

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One NSTAR Way
Westwood, Massachusetts 02090

NSTAR Electric also intends to submit standby and supplemental service tariffs to the Department in the near future that will, upon approval by the Department, establish specific rates, prices and terms and conditions for standby distribution service (i.e., distribution service provided as a backup to self-generation) and supplemental distribution service (i.e., distribution service above amounts that are self-generated). These tariffs will ensure that customers who self generate, but require standby service from NSTAR Electric, will pay no more, and no less, than the costs incurred for that service. The following considerations are of particular importance to [redacted] as you proceed with your project:

1. Meter Change-Out

   The individual meters can be removed by NSTAR Electric and replaced with a single meter properly sized for the peak electricity loads of the building when the cogeneration unit is otherwise not in operation (i.e., during maintenance or unexpected outages). The cost of removing the existing meters and the installation of the new meter will be the responsibility of [redacted] See Terms and Conditions, § II.4A of Attachment 1.

2. Operation of the 80 kW Generator

   The Terms and Conditions require that a customer notify NSTAR Electric in writing before making any significant change in the customer's electrical equipment if the change could affect the capacity or other characteristics of the company's facilities required to serve the customer. § II.7B of Attachment 1. NSTAR Electric requires such written notice, which should include a complete description of the equipment being added, electrical line drawings for the proposed setup and the proposed date of installation.

   The Interconnection Tariff requires that the proposed generating facility "operate in such a manner that does not compromise, or conflict with, the safety or reliability of the [NSTAR Electric power system]. The Interconnecting Customer should design its equipment in such a manner that faults or other disturbances on the [NSTAR Electric power system] do not cause damage to the Interconnecting Customer's equipment." Interconnection Tariff at § 2.0 (Attachment 2).

   All proposed new sources of electric power without respect to generation ownership, dispatch control, or prime mover that plan to operate in parallel with the electric power system must submit a completed application and pay the appropriate application fee to NSTAR Electric. See Interconnection Tariff at § 3. Process Overview (Attachment 2).

   As stated in the Interconnection Tariff, the Interconnection Customer "shall be responsible for all costs associated with the installation and construction of the Facility and associated interconnection equipment on the Interconnecting

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

Customer's side of the [Point of Common Coupling].[2] Interconnection Tariff at § 5.2 (Attachment 2). Units over [redacted] must be equipped with a bi-directional meter that has remote access capability and may be an interval meter. Interconnection Tariff at § 8.1 (Attachment 2).

[redacted] should also be aware that the it will be responsible for "all costs reasonably incurred by [NSTAR Electric] attributable to the proposed interconnection project in designing, constructing, operating and maintaining the System Modifications." Interconnection Tariff at §5.3 (Attachment 2).

Please review the Interconnection Tariff carefully for a complete description of the requirements that must be met before operation of a self-generation unit.

3. Standby and Supplemental Delivery Service

NSTAR Electric intends to offer a two-part tariff for self-generators in order to provide both standby and supplemental service.

NSTAR Electric's standby delivery service provides for NSTAR Electric to stand ready to provide a continuous delivery and supply of electricity to replace the portion of the customer's internal electric load normally supplied by the customer's generation unit, should the generation unit be unable to provide all, or a portion of, the expected electricity supply.

Supplemental Delivery Service is delivery of electricity over NSTAR Electric-owned facilities for consumption at the customer's facilities. Supplemental Delivery Service is intended to deliver electricity to satisfy that portion of the customer's internal load that is not served from the Generation Unit. In accordance with the availability provisions of Boston Edison's tariffs, Supplemental Delivery Service will be provided under Boston Edison's General Service Rate G-2.

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2 The point of common coupling is the point where the Interconnecting Customer's local electric power system connects to the NSTAR Electric power system, such as the electric power revenue meter or premises service transformer.

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

We look forward to working together with [redacted] to interconnect [redacted] generating unit with the NSTAR Electric grid and accomplishing the work necessary to remove the existing meters and installing the required metering associated with the new generating facility. To that end, please call me to arrange for a meeting to further identify and discuss each of the issues that must be addressed to complete your project successfully.

Sincerely,

Frank Gundal
Sr. Engineer

cc: Henry Lamontagne, NSTAR Regulatory Policy & Rates
Neven Rabadjija, NSTAR Legal
David Rosenzweig, Esq.
[redacted]

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NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

February 6, 2004

[redacted]

Dear [redacted]

This letter is in response to your letter of January 23, 2004, to [redacted] and notification of receipt of your letter to me on the same date.

In response to your request to [redacted], I assure you that your application for interconnection is being handled by the appropriate personnel at NSTAR authorized to evaluate and approve a successful and safe interconnection agreement in a timely manner.

With respect to your references to the pending tariff and guidelines, while the Company endorses the proposed tariff, until the DTE has formally approved the proposed interconnection tariff, NSTAR Electric is not in a position to fully and completely follow every detail of the proposed process. Even if the proposed tariff were approved by the DTE, a missed time line does not result in a "waiver" of the right to conduct a study and determine a proper interconnection design. As a result, your insistence on compliance with the details of the proposed tariff process, and the unilateral attempt to impose "remedies" is misplaced. The current, approved interconnection guidelines were supplied to [redacted] along with the NOI and are being adhered to.

With regard to the technical feedback in the memo attached in your letter, our engineering group will review the letter and a response will be forthcoming, although, given the extent of your objections, it may take more than the ten days you allow to prepare a full response. In fact, given the number of technical points on which there appears to be genuine disagreement (because [redacted] "disputes the need" or deems an issue to be "resolved"), we believe it is both incorrect and counterproductive for [redacted] to be asserting "delay, obfuscation and bad faith" on the part of the Company.

It is important to note that [redacted] is proposing to interconnect generation into a "Spot Network System". Most generators interconnect connect to "Radial Systems," which are relatively straightforward. For a generator of the size you are proposing, NSTAR is unaware of any state or federal interconnection guidelines that would permit connection to a "Spot Network System". As a matter of policy, most utilities prohibit the type of installation you are proposing.

Notwithstanding the above, in an effort to move your project forward, NSTAR has offered a number of potential solutions. For example, NSTAR has:

- Suggested that you reduce the size of the generator interconnection to the UL approved rating of your generator [redacted]. [redacted] has dismissed this suggestion.

NSTAR ELECTRIC GAS
One NSTAR Way
Westwood, Massachusetts 02090

- Suggested that you transfer the customer from a "Spot Network System" to a "Radial System". This would make the generator interconnection a fast-track project. [redacted] has dismissed this suggestion.

- Required that you have the generators and safety systems independently tested by a third party. [redacted] has not accepted our requirement.

- Developed "Control and Protection Requirements", which would enable the project to move forward. [redacted] disputes the need.

The Company continues to be genuinely committed to working with [redacted] to reach a mutually satisfactory interconnection. However, our first priority must remain protection of the Company's system and service to other customers. We will continue to evaluate the documentation submitted by [redacted], and will respond to your latest engineering submittal within the next 30 days.

Sincerely,

Penni McLean-Conner, P.E.
Vice President

Cc: [redacted]
David Le, NSTAR Account Management

One NSTAR Way
Westwood, Massachusetts 02090

December 24, 2003

[redacted]

Dear [redacted]

This letter is in response to your letters of November 24 and December 18, 2003, to [redacted] referencing certain correspondence between [redacted] and NSTAR Electric.

First, let me assure you that your letters received immediate attention, as do all letters from our customers. Any delay in response is attributable solely to our desire to respond fully and accurately to the issues you have raised.

Second, we echo your desire to work together in a cooperative and productive way to determine how best to conclude the request for interconnection. As you know, NSTAR Electric participated extensively and cooperatively in the collaborative process for distributed generation interconnection sponsored by the Mass. DTE, and subscribes fully to the outcome of that collaborative, including the proposed tariff terms and conditions currently awaiting DTE approval. While there is some uncertainty as to what the appropriate process for review of interconnection requests should be in this interim period, given the existence of current regulations that are not responsive to existing circumstances, and the pendency of approval of the new procedures, NSTAR Electric intends to follow, as much as possible, the proposed processes that were developed in collaboration with interested stakeholders. Please understand, however, that until the DTE has formally approved the proposed interconnection tariff, NSTAR Electric is not in a position to fully and completely follow every detail of the proposed process.

Without revisiting the details of recent interactions and communications regarding [redacted] request for interconnection, the following summarizes our understanding of where we are in the process, consistent with the proposed interconnection procedures:

- [redacted] has provided a "Notice of Intent", for this project as required under the existing interconnection guidelines. [redacted] did not submit the new application, which in on page 67 of the tariff, required under the proposed interconnection procedures.
- In the Notice of Intent, the required one-line diagram was submitted.
- In the Notice of Intent, the required equipment specifications were not submitted. [redacted] provided manufacture literature on a capstone 60kw microturbine generating unit. [redacted] has sent UL test data on [redacted]. The one-line diagram submitted proposed to connect 10 capstone units together to make [redacted] We have not received manufacture technical date on the operation of the equipment at this level. We have also not received test data from an

One NSTAR Way
Westwood, Massachusetts 02090

independent testing lab for the equipment to operate at this level. It is not technically reasonable to believe that the characteristics of a generator [redacted] will be similar to the equipment operating [redacted]

- In support of evaluating this project, and moving it forward, NSTAR held an initial review meeting with [redacted] (a scoping meeting page 10 of the tariff), to review the technical data for the project. This meeting was held on October 7 at NSTAR's Westwood facility

NSTAR followed this meeting with a letter, data November 12, 2003. The memo advised [redacted] that they are proposing to connect to the Network System, that this possesses significant technical issues and outlined several alternatives to interconnect while addressing the operating concerns of the company. In addition, since the [redacted] equipment is certified [redacted], we authorized [redacted] to proceed with this level of interconnection on the Network System. [redacted] responded that NSTAR proposals are "uneconomic proposals.....". Please be assured that the proposals were submitted to fast track your interconnection application while providing for proper operation and safe interconnection for our workers and the general public. The Nstar Proposal has been acceptable by other interconnection customers who have been successfully operation for several years.

The proposed interconnection design does not provide the necessary protection to NSTAR's distribution system and there remain substantial technical obstacles not yet addressed by [redacted]. These issues have been detailed in the attached preliminary technical review labeled Appendix A.

Please be assured that we are processing your application for interconnection via the intent of the Standard Process as outlined in the Collaborative. The 125-day timeline established is business days and is halted when necessary information is requested.

In addition, please be advised that NSTAR Electric has filed with the Mass. DTE a proposed "stand-by" rate (Docket No. 03-121), which is designed to be fully compensatory to NSTAR Electric.

In conclusion, NSTAR is committed to serving our customers well including assistance with distributed generation. The network is a small percentage of our overall service territory and we have assisted in numerous installations over the years outside the network with over 100 applications in 2003 alone. We look forward to your response to the issues identified and to a positive working relationship.

Sincerely,

Frank Gundal
Sr. Engineer

Cc: [redacted]

One NSTAR Way
Westwood, Massachusetts 02090

[redacted]
David Le, NSTAR Account Management

One NSTAR Way
Westwood, Massachusetts 02090

February 25, 2004

[redacted]

Dear [redacted]

NSTAR has completed the review of [redacted] "revised proposal", dated January 23, 2004, to interconnect generators onto the "Spot Network System" at [redacted] The "Spot Network System" presents several significant challenges, which technically limits the interconnection of generation. Industry studies, guidelines and principles have been developed which outline the technical requirements needed to interconnect generators to "Spot Network Systems". The most pertinent documents that provide guidance are industry recognized Standard IEEE-1547 and UL Standard 1741. These Standards, developed by industry experts, outlines the "Prudent Utility Practices" which we followed in evaluating the proposed interconnection. Although [redacted] has addressed some of the technical requirements of IEEE-1547 and UL Standard 1741, the proposed interconnection design failed to address several significant issues:

1) [redacted] proposed design could cause all the network protectors to open when a primary fault occurs, which will cause a power outage to the building. IEEE Standard 1547-2003, sub-clause 4.1.4.2 requires the interconnection design to prohibit this event:

""Any DR installation connected to a spot network shall not cause operation or prevent the reclosing of any network protectors installed on the spot network. This condition shall be accomplished without requiring any changes to prevailing network protector clearing time practices of the Area EPS."

2) [redacted] proposed design could cause two power sources to be separated across the "Network Protectors". The Manufacturer's Network Protector operating manual, states that Network Protectors shall not be used for this function. If permitted to interconnect in this manner, the protector's dielectric withstand capability will be over-stressed with potential catastrophic results. Per IEEE Standard 1547-2003 sub clause 4.1.4.2:

"Network protectors shall not be used to separate, switch, serve as a breaker failure backup or in any manner isolate a network or network primary feeder to which DR is connected from the remainder of the Area EPS, unless the protectors are rated and tested per applicable standards for such an application."

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3) [redacted] proposed design will cause more then one Network Protector to open during normal operation. This is in violation of the draft Federal interconnection guideline issued by the Department of Energy "Standard of Small Generator Interconnection Agreement and Procedures; Proposed Rules "18 CFR Part 35" and IEEE-1547-2003 under Su-clause 4.1.4.2. IEEE states:
""Connection of the DR to the Area EPS is only permitted if the Area EPS network bus is already energized by more than 50% of the installed network protectors".

4) [redacted] proposed design could cause the Network Protectors to cycle, which will cause failure of the network protector. This is in violation of IEEE-2003 Sub-cause 4.1.4.2
""The DR output shall not cause any cycling of network protectors"....or prevent the reclosing of any network protectors installed on the spot network.....".

For your review, attached is NSTAR's detailed engineering analysis. Based on technical, operational, and safety issues, still not addressed in the revised proposal, [redacted] is still not permitted to interconnect to the "Spot Network System'.

In [redacted] memo dated January 23, 2004, it was requested that we provide specific information about our network system. We are more than pleased to provide the requested information. Please see Attachment A, for the information. Please feel free to request additional information.

We look forward to the meeting with [redacted] scheduled for March 6, 2004. This will enable us to go over the engineering results in greater details.

Regards,

Frank Gundal
Sr. Engineer

One NSTAR Way
Westwood, Massachusetts 02090

February 6, 2004

[redacted]

Dear [redacted]

We received your letter dated February 6, 2004. Our response to your previous correspondence was sent out on February 9, 2004 and is also attached to this letter for reference.

Without dwelling on the details, for the record, we clearly disagree with your characterization of NSTAR's actions and motivations with respect to your proposed interconnection and our interactions to date.

We note the change in your application from an "On-Site Generating Facility" to a "Qualified Facility". In your letter you indicate, "...it was clear from the extensive data supplied...that the facility [redacted] planned to install would be a QF". We did not, however, assume that [redacted] made an error in their original application and have, until now, considered this an On-Site Generating Facility. We disagree, however, that you are entitled to characterize your facility as you see fit. We look forward to receiving evidence that your proposed facility meets the QF criteria specified by FERC in 18. C.F.R. Sections 292.203 (a) and (b), as amended.

As indicated in our response to you in the attached letter, we will review your technical response and reply back in the time indicated. As of this date there remain significant technical issues to the proposed network interconnection. As we have indicated previously, if you were proposing a radial interconnection, rather than a network interconnection, the technical issues would most likely have been resolved by now, and the interconnection would have been permitted.

As it stands, NSTAR believes that the equipment you propose to interconnect is not compatible with the character of service (network service) supplied by NSTAR at the proposed location, as required under 220 C.M.R. 8.00, Section 4(c) (the "Regulations"), and that, as a result, significant modifications to NSTAR's distribution system could be required. These modifications may include, but are not limited to, moving this customer from network to radial service in order to accommodate the proposed interconnection. Accordingly, NSTAR anticipates filing a petition with the Department for additional time to accommodate an interconnection, as permitted by Section 6(a) of the Regulations.

We look forward to establishing a productive dialogue with you regarding the proposed interconnection. However, as of this time, you are not authorized by NSTAR to interconnect to the network system.

Sincerely,

One NSTAR Way
Westwood, Massachusetts 02090

Penni McLean-Conner, P.E.
Vice President

Cc: [redacted]
David Le, NSTAR Account Management